

REMARKS

The Examiner is thanked for the Office Action of April 16, 2007. This request for reconsideration is intended to be fully responsive thereto.

CLAIM AMENDMENTS

Claims 2 and 3 were amended to clarify the components of each element. The amended Claim 2 now states that the receiving detection means is comprised of the first sensor and the second sensor and that the controlling means, according to the result of the first and second sensor detection, starts or stops the moving means, switches the valve to send the compressed air to the take-out means. Amended Claim 3 was amended to clarify the feature by further limiting that the controlling means controls the stepping motor of the moving means. All amendments are clearly supported in the current specification. No new matter has been added.

CLAIM REJECTIONS 35 U.S.C. 112

Claims 2 and 3 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner suggested that no function is specified by the word(s) preceding "means", it is impossible to determine the equivalents of the element. The Applicant respectfully disagrees; however, to clarify the functions of "means" and to facilitate the examination process, the Applicant amended Claims 2 and 3. By these amendments, the terms, "detection means", was deleted from Claim 2, and the term, "controlling means" was amended to read, "for controlling starting and stopping of said moving means...". The term, "moving means" obviously has a "stepping motor" (Claim 3) and is clearly explained in independent

Claim 1, on which Claim 2 depends, where it states the moving means is to move "the receiving recess from a receiving region..." Amended Claims 2 and 3 contains means clauses with specified functions as the Examiner suggested in the Office action, and therefore, the claim rejections under 35 U.S.C. 112 should be cleared.

REJECTIONS UNDER 35 U.S.C. 102 (b)

Claims 1, 2 and 4 were rejected under 35 U.S.C. 102 (b) as being anticipated by US 5,609,463 to Kobayashi. With respect to Claim 1 of the present invention, the Examiner suggested that Kobayashi teaches the receiving portion (FIG. 1), the receiving recess (FIG. 1), a cover (C4 L15-20), the take-out means, a moving means (C4 L41-43), and the exclusion means. With respect to Claim 2 of the present invention, the Examiner suggested that Kobayashi teaches the first sensor, the second sensor, and the controlling means for controlling the take-out means as determining that the waterproof seal is received by the receiving recess when the result of the receiving detection means shows that the first sensor detects the positioning bore and the second sensor does not detect the slit (C5 L42-49). With respect to Claim 4, the Examiner suggested that Kobayashi teaches the waterproof seal (2) supplied from the parts feeder and is inserted in an end of an electrical transmission cable (W); and a connecting terminal is attached to perform press-connection (C4 L8-10). The Applicant respectfully disagrees.

Kobayashi discloses the technology of supplying parts and the device/method discloses:

the turntable 10 that is functioning to supply
waterproof plugs and holds plural waterproof plugs with the
recess 12 in the specified manner;

the support member 20 that detachably supports the turn table 10;

the slide plate 30 that rotatably supports the support member 20;

the air motor 40 that is installed on the back surface of the slide plate 30 and functions as the rotation drive means to rotate the turn table 10 via the support member 20;

the pair of frame members 60, 70 that support the slide plate 30 via the pair of slide mechanisms in the X-axis direction;

the base 90 that fixes each frame members on the surface thereof; and

the air cylinder 80 that is provided between the fixed plate 64 fixed on the frame members and the movable member 32 and functions as the slide means. (CL4 14-31)

As reviewing the technology disclosed in Kobayashi, the Applicant suggests the following major differences between the present invention and Kobayashi which should be sufficient evidence to show the patentability of the present invention.

Receiving Portion and Recess

The receiving portion of the present invention, as shown in FIG. 1, has a rotatable disc surface inclined to the predetermined degree while the turntable of Kobayashi has a horizontal disc surface. Furthermore, plural receiving recesses are formed on

circumferential surface of the inclined receiving portion, and therefore as shown in FIG. 4 by rotating the receiving portion, the waterproof seals can easily fit in the receiving recess in an appropriate position when the shape of the waterproof seal matches the shape of the opening of the receiving recess while having plural waterproof seals on the surface of the receiving portion. Since the waterproof seal has different sized front end and back end shapes, the waterproof seal can easily be arranged and fit in the shape of the opening of the receiving recess, which eliminates the chance of placing the waterproof seal in an inappropriate position within the receiving position. In addition, the waterproof seal positioned in the receiving portion can be removed in the direction of axial right angle, and comparing to when removing the same in the orthogonal direction relative to the surface of the receiving portion, the direction of the waterproof seal does not tend to move/change, and therefore the waterproof seal in the predetermined direction can surely be removed in the same direction.

For Kobayashi, as is obvious in the figures, plural recesses on the turntable are positioned orthogonal to the upper surface of the turntable, and plural recesses are positioned in a concentric circular manner on the surface of the turntable. Therefore, the positions of the simple recesses on the turntable surface of Kobayashi are totally different from the positions of the receiving recesses on the circumferential surface of the receiving portion in the present invention. Also, the simple recesses on the turntable surface of Kobayashi and the configuration of the receiving recesses of the present invention provide for great differences in their function of setting or removing of the waterproof recess.

Also, for the recesses of Kobayashi, the waterproof plugs are positioned to match their longitudinal direction with the rotational axial direction of the turntable. The present invention is different in that the end of the waterproof seal is position to direct

the same toward the center of the receiving portion.

In addition, since the turntable of Kobayashi has the table surface parallel to the horizontal surface while the receiving portion of the present invention inclines and is rotatably supported, when trying to place the waterproof plug in the recess, which is orthogonal to the table surface, the waterproof plug cannot easily be placed in the recess by simply turning of the turntable. Therefore, Kobayashi has an additional element, i.e., vibration means, which facilitates the placing of the waterproof plug by vibrating the same.

Again, in the present invention, the receiving portion inclines and is supported; and the respective receiving recess is designed to have an opening on the circumference and the upper surface of the receiving portion. Hence, no extra element, i.e., a vibration means, is necessary. Furthermore, plural waterproof seals can be kept in the space surrounded by the slant receiving portion surface and the cover, and by rotating the receiving portion, the directions of the waterproof seals matching the shape of the opening of the receiving recesses can easily be positioned therein, which eliminates the inconvenience of the waterproof seal installation of Kobayashi.

Accordingly, the various points explained above, i.e., (1) positioning of the receiving recess, (2) direction of removing the waterproof seal, (3) incline surface of the receiving portion, and (4) no vibration means, should be more than sufficient to overcome the 35 U.S.C. 102 (b) rejection set out by the Examiner.

Cover

The present invention has the cover, which restricts the movement of the waterproof seals in the direction of the axial right angle until the take-out position of the

take-out means, in order to prevent the waterproof seals positioned in the receiving recess from being displaced accidentally due to the rotation of the receiving portion. Therefore, the cover fits over the circumference of the receiving portion, and it holds the waterproof seals on the receiving portion surface, and further creates the above-described space together with the receiving recesses for storing the waterproof seals.

In Kobayashi, from the drawings and also from the descriptions in the specification, the support member is simply to support the lower surface of the turntable and no other functions as the present invention is taught or suggested therein. This is another major difference between Kobayashi and the present invention.

Take-Out Means

In the present invention, in order to remove the waterproof seals positioned in the receiving recess, which are formed on the circumference of the receiving portion, in the direction of the axial right angle, as shown in FIGS. 3 and 4, the take-out means 35 is positioned orthogonal to the circumference of the receiving portion. Then, the waterproof seals are moved to the take-out position due to the rotation of the receiving portion are transferred to the next process as being taken out horizontally along the direction of the axial right angle by the take-out device 35.

Kobayashi has the conveying device 110 which removes the waterproof plugs in the recesses in the orthogonal direction (rotational axial direction) to the table surface. There, depending upon the shape of the parts or the center of gravity of the parts to be removed, the direction of the parts can easily be changed, which can be an obstacle for the safe removal.

REJECTION UNDER 35 U.S.C. 103 (a)

Claim 3 was rejected under 35 U.S.C. 103 (a) as being unpatentable over Kobayashi in view of US 5,826,697 to Mochizuki. The Examiner suggested that Kobayashi does not teach a stepping motor as Mochizuki teaches (1) and that it would have been obvious to one of ordinary skill in the art at the time of the invention to use a stepping motor as taught by Mochizuki into the invention of Kobayashi to allow the disc to rotate forwards or backward.

For the same reasoning stated above in the discussion of the rejection under 35 U.S.C. 102 (b), this rejection should be moot.

Conclusion

It is respectfully submitted Claims 1-4 are now in condition for allowance and notice to that effect is respectfully requested.

Should the Examiner believe further discussion regarding the above claim language would expedite prosecution they are invited to contact the undersigned at the number listed below.

/Tracy M Heims, 53010/
Tracy M Heims
Reg. # 53,010

Apex Juris, PLLC
12360 Lake City Way Northeast, Suite 410
Seattle, Washington 98125
Phone: 206-664-0314
Fax: 206-664-0329
Email: usa@apexjuris.com